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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,244	12/31/2003	Min-Seok Choi	P24738	6998
7055 7590 08/23/2007 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER STORMER, RUSSELL D	
			ART UNIT 3617	PAPER NUMBER
			NOTIFICATION DATE 08/23/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

<b>Office Action Summary</b>	Application No. 10/748,244	Applicant(s) CHOI, MIN-SEOK	
	Examiner Russell D. Stormer	Art Unit 3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7,8 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3-5,7,8 and 10 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 13, 2007 has been entered.

***Specification***

2. The disclosure is objected to because it is replete with incorrect grammar or non-idiomatic English, such as the following examples:

In line 20 of page 6, the term "to facilitate to position" is not understood.

In line 2 of page 7 the term "matters" should be changed to - -matter- -. In line 5 the term "a friction accused by" does not make sense.

Applicant should review the specification to correct all grammatical errors and place the specification in proper idiomatic English.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 3-5, 7, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tronville in view of MacIsaac and Holbrook.

Tronville (previously applied) discloses a torsion beam axle suspension comprising left and right trailing arms 14, a torsion beam 12 coupled between the trailing arms, a wheel connector 50 provided on each trailing arm, and a shock absorber mount provided in the outermost end 14a of the trailing arms. As shown best in figures 2 and 4, the shock absorber 54 is mounted to the support or mount 52 inside of the outermost end 14a of the trailing arms, and rearward of the wheel connector 50.

The shock absorber in Tronville is not shown.

MacIsaac (previously applied) teaches a suspension assembly including a shock absorber. In figures 10 and 11 the connection between the axle and the shock absorber is in the form of a ball joint 250, including a ball stud and a socket.

Holbrook (newly cited) teaches a ball joint comprising a ball and socket joint which allows a great range of movement for a rod 10, 200, or 100. The joint comprises a ball 40, 240 mounted in a generally cylindrical socket 300. A pair of insertion holes 318, 378 allow fasteners 350 to be inserted therein and are configured to adjust a position of the rod 10, 200, or 100.

From the teachings of MacIsaac and Holbrook it would have been obvious to provide the trailing arm suspension of Tronville with a shock absorber having a ball and socket joint as this would allow a wide range of movement (such as movement in more than one plane) between the shock absorber and the axle. Further, it would have been obvious that the ball and socket joint applied to the shock absorber assembly of Tronville could have a construction including a pair of fasteners inserted into insertion holes on opposing surfaces of the socket to allow a position of the shock absorber to be adjusted. Those of ordinary skill in the art would have found it obvious and desirable for the ball and socket joint to be constructed in a way that would allow the adjustment of a position of the shock absorber.

### ***Response to Arguments***

6. Applicant's arguments filed June 13, 2007 have been fully considered but they are not persuasive.

Initially, it should be noted that Applicant does not specify whether it is the previous version or the amended version of claims 1, 5, and 8 which are argued to be

allowable over Tronville as applied in the previous office action. IT will be presumed that Applicant intended to argue that the amended claims define over Tronville.

In response to the argument that the shock absorber of Tronville is not mounted "inside of the outermost end" of the trailing arms, it is noted that the "outermost" ends of the trailing arms are not specifically pointed out in the specification and are not referenced with a reference character in the drawings, and the specification is silent as to whether "inside of" refers to the mount being spaced from the end, or being laterally inside of the trailing arms, or being inside a longitudinal end portion of the trailing arms. It should be noted that the lead line for reference character 4a points to a portion of the trailing arm near the rear end.

Claims 1, 5, and 8 claim the mount as being provided or formed inside of the outermost end of the trailing arms, but are silent as to what is meant by "inside of." Absent any clear definition of the term "inside of," this term is open to interpretation, and can reasonably be interpreted as meaning "inside of the longitudinal dimension of the trailing arms."

It is submitted that the support or shock absorber mount 52 of Tronville is provided inside of the outermost end 14a of the trailing arms, as shown in figures 2 and 4, inasmuch as the in the longitudinal dimension of the trailing arms, the mount 52 is located somewhere within the ends, near but spaced from the rear end 14a, and is therefore "inside of" the outermost end 14a.

While specifically arguing the teachings of the MacIsaac reference, Applicant does argue that the combination of Tronville, MacIsaac, and Molenaar "appears to

constitute an impermissible modification of a modification. The reasoning for this argument is not presented, and Applicant offers no evidence that such a modification would be "impermissible." Regardless, as such an argument would apply to the rejection set forth above in paragraph 5, Maclsaac is merely cited to teach that it is known to use a ball and socket joint to mount a shock absorber to a vehicle axle. Maclsaac does not show the details of such a structure. Holbrook teaches one of many possible constructions of a ball and socket joint. Once it was decided to use a ball and socket joint to mount a shock absorber, those of ordinary skill in the art would consider known designs of such a joint. Thus, since adjustability of the joint would be beneficial, a ball and socket joint in which the socket could be adjusted in some way would be desirable. Therefore, even though not an "improper modification of a modification" as purported by Applicant, The ball and socket joint of Maclsaac is not being modified inasmuch as there is no physical incorporation of Maclsaac into the assembly of Tronville, and Maclsaac is cited for the teaching that a ball and socket joint could be used in mounting a shock absorber.

Moreover, there is no improper hindsight as implied by Applicant since the references are properly applied and their teachings combined. Given the structures and teachings of the references as a whole, the results of applying a ball and socket joint to Tronville, and providing specific structure, would have been obvious and predictable.

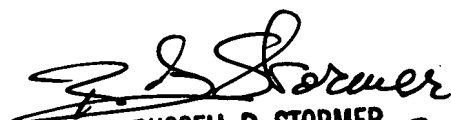
**Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Luecke et al and Carnevali show other ball and socket joints.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell D. Stormer whose telephone number is (571) 272-6687. The examiner can normally be reached on Monday through Friday, 9 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
RUSSELL D. STORMER  
PRIMARY EXAMINER 8/17/07